Memoirs of Museum Victoria 66: 77–80 (2009)

ISSN 1447-2546 (Print) 1447-2554 (On-line)
http://museumvictoria.com.au/About/Books-and-Journals/Journals/Memoirs-of-Museum-Victoria

Parelasmopus poorei a New Species of Maeridae (Crustacea: Amphipoda) from Southern Australia

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Abstract Hughes, L.E. 2009. *Parelasmopus poorei* a New Species of Maeridae (Crustacea: Amphipoda) from Southern Australia. *Memoirs of Museum Victoria* 66: 77–80.

This paper describes the maerid amphipod *Parelasmopus poorei* sp. nov. from southern Australia. This is the sixth species in the genus *Parelasmopus* recorded in Australia and the twelfth for the world.

Keywords Crustacea, Amphipoda, Maeridae, *Parelasmopus poorei*, new species, Australia, Taxonomy

Introduction

Parelasmopus Stebbing, 1888 is an Indo-West Pacific genus of benthic amphipods. *Parelasmopus* was recently placed in the family Maeridae (Krapp-Schickel, 2008). To date, Australia has the largest number of recorded taxa within this genus, six species: *Parelasmopus cymatilis* Lowry & Hughes, 2009, *P. echo* Barnard, 1972, *P. poorei* sp. nov., *P. sowpigensis* Lowry & Springthorpe, 2005, *P. suensis* (Haswell, 1879), and *P. ya* Barnard, 1972.

Materials and Methods

Material was dissected in 80% ethanol. Permanent slides were made using Aquatex™ mounting media. Scientific illustrations were made using Leitz Laborlux K and Wilde Heerbrugg stereomicroscopes fitted with camera lucida. Abbreviations for parts are as follows: **A** - antenna, **F** - accessory flagellum, **G** - gnathopod, **LL** -labium, **Mx1**- maxilla 1, **P** - pereopod, **T** - telson and **U** - uropod.

Descriptions were generated from a DELTA database (Dalwitz, 2005) to Maeridae genera and *Parelasmopus* species of the world. Species diagnosis is provided in **bold** text within the description. Species examined are lodged in the Museum Victoria (MV).

Maeridae Krapp-Schickel 2008

Parelasmopus Stebbing, 1888

Parelasmopus poorei sp. nov.

(Figs 1, 2)

Type locality. West of Point Ricardo, Victoria, Australia.

Type material. Holotype male, 11.0 mm, 4 slides, MV J 60148; paratype female, 13.5 mm, 1 slide, MV J 60147; paratypes J25634, 56 specimens, 11.7 km West of Point Ricardo, Eastern Bass Strait, (37° 49' 53" S 148° 30' 08" E), 27 m, February 1991, coll N. Coleman (MSL-EG 105).

Additional material examined. 14 specimens, MV J25632, 11.7 km west of Point Ricardo, Eastern Bass Strait, (37° 49' 53" S 148° 30' 08" E), 27 m, 4 June 1991, coll. N. Coleman (MSL-EG 78); 38 specimens, MV J25633, 11.7 km west of Point Ricardo, Eastern Bass Strait, (37° 49' 53" S 148° 30' 08" E), 27 m, February 1991, coll. N. Coleman (MSL-EG 104); 2 specimens, MV J25635, 14.3 km west south west of Point Ricardo, Eastern Bass Strait, (37° 50' 44" S 148° 28' 24" E), 32 m, 26 September 1990, coll. N. Coleman (MSL-EG 46); 25 specimens, MV J25636, 11.7 km west of Point Ricardo, Eastern Bass Strait, (37° 49' 53" S 148° 30' 08" E), 27 m, 4 June 1991, coll. N. Coleman (MSL-EG 77); 58 specimens, MV J25637, 11.7 km west of Point Ricardo, Eastern Bass Strait, (37° 49' 53" S 148° 30' 08" E), 27 m, Smith-McIntyre grab, February 1991, coll. N. Coleman (MSL-EG 103); 10 specimen, MV J56869, 8 km south of South East Point, Wilsons Promontory, Eastern Bass Strait, (39° 12' 54" S 146° 27' 18" E), 65 m, epibenthic sled, 18 November 1981, (BSS 180); 5 specimens, MV J57018, Cliff Head, 30 km south of Dongara, (29° 32' 00" S 114° 59' 00" E), 2.0 m, 22 April 1986, (SWA 85); 3 specimens, MV J57145, North Lumps, 2 km off Mullaloo, (31° 47' 18" S 115° 42' 48" E), 8.0 m, 2 May 1986, (SWA 112); 3 specimens, MV J57203, North Lumps, 2 km off Mullaloo, (31° 47' 18'S, 115° 42' 48'E) 7.0 m, 2 May 1985, coll. H. M. LewTon and G.C.B. Poore (SWA 113); 6 specimes MV J57199, north end of Little Beach, Two Peoples Bay, (34° 58' 24's, 118° 11' 42'E), depth unknown, 5 April 1984, coll. H. M. LewTon and G.C.B. Poore (SWA10).

Description. Based on holotype male, 11.0 mm, 4 slides, MVJ60148.

Head. *Head* eyes ovate; lateral cephalic lobe broad, truncated, anteroventral margin with notch. *Antenna 1* longer than antenna 2; peduncular article 1 subequal to article 2, with

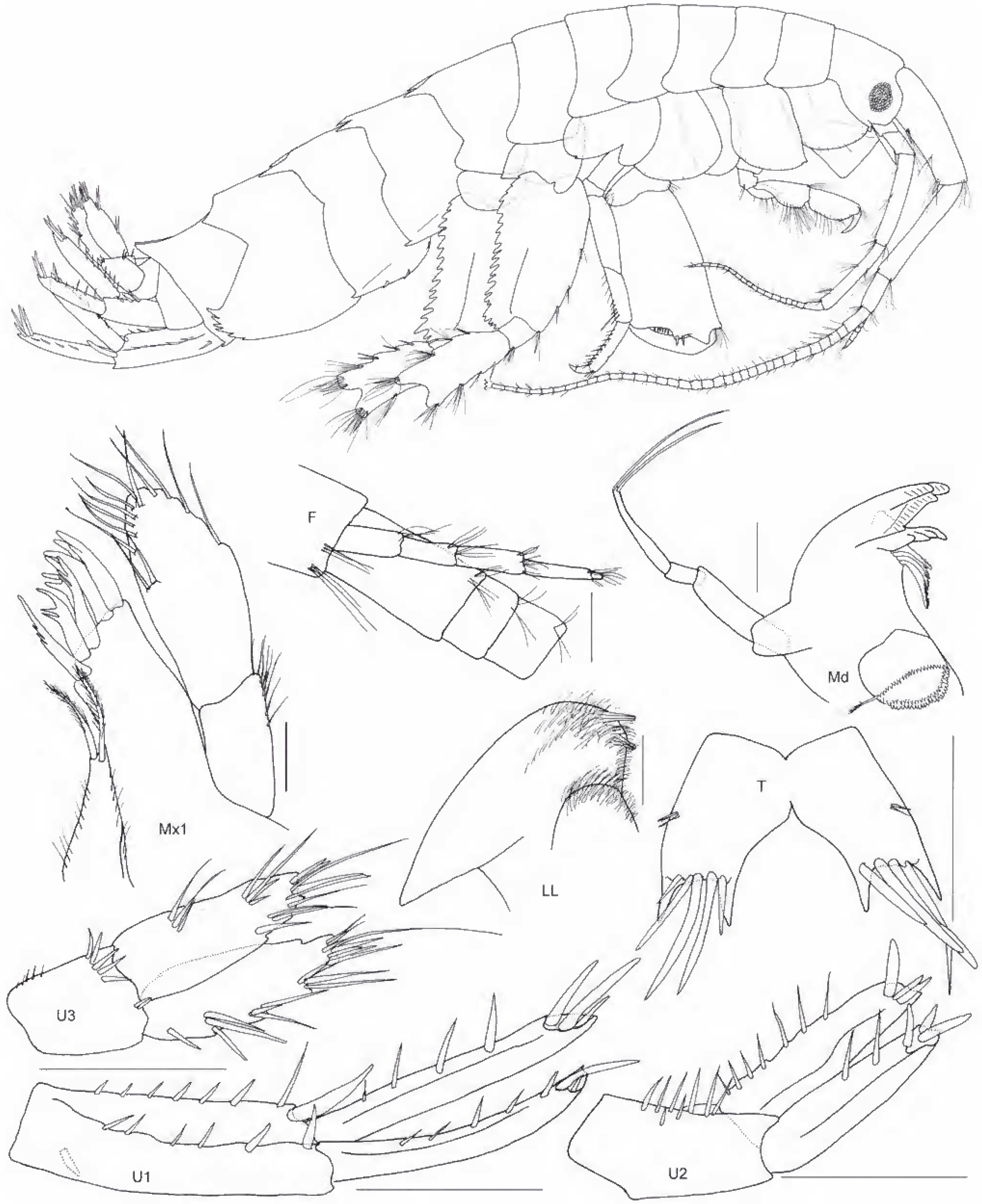
F
Md
Mx1
LL
T
U3
U1
U2

Figure 1. *Parelamopus poorei* n. sp.: holotype male, 11.0 mm, MVJ60148. Scales for Md, F, Mx1 and LL represent 0.2 mm. Scales for U1-3 and T represent 0.5 mm.

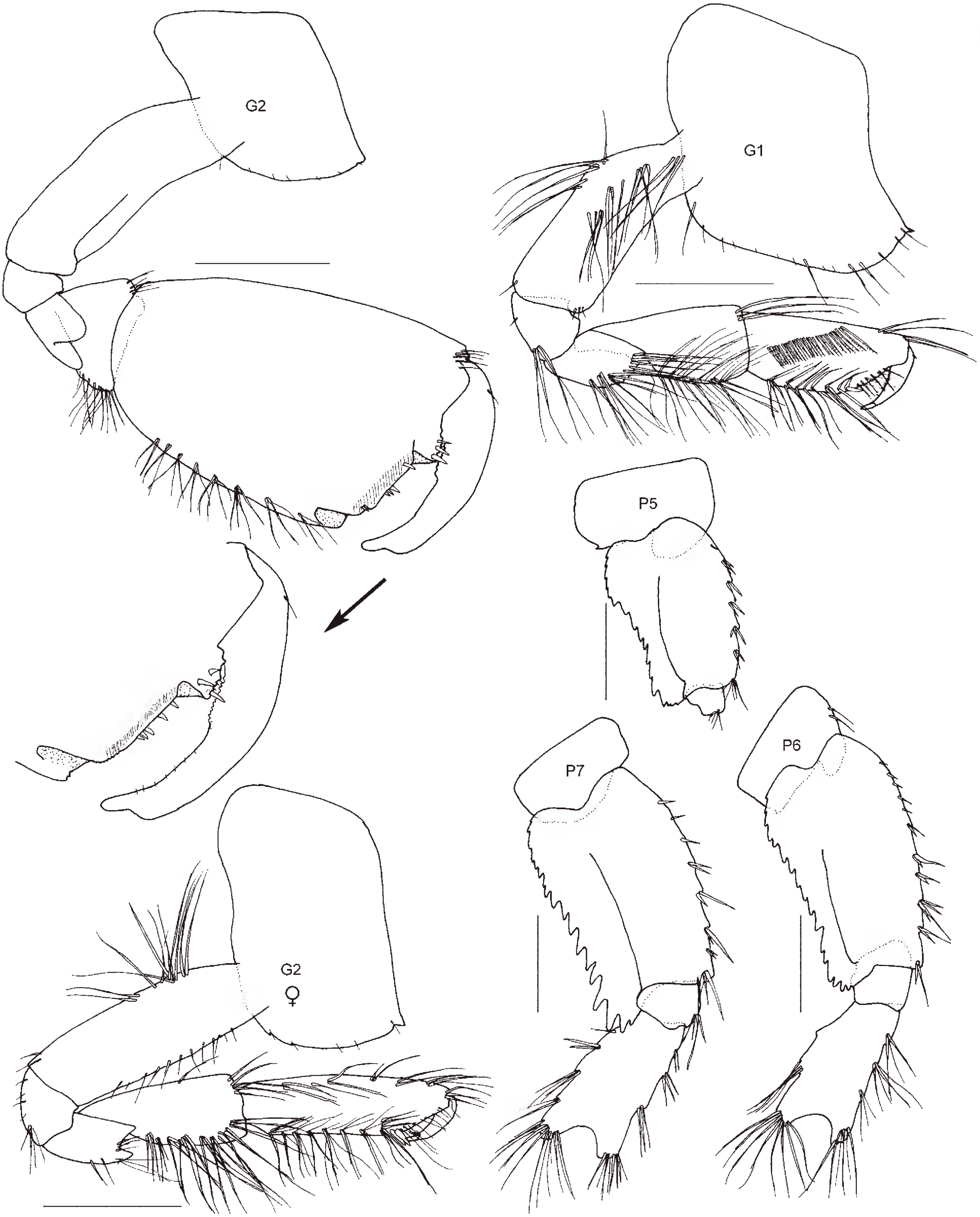

Figure 2. *Parelamopus poorei* n. sp.: holotype male, 11.0 mm, MVJ60148, paratype female, 13.5 mm, MV J 60147. Scales represent 0.5 mm.

2 robust setae along posterior margin; article 2 longer than article 3; flagellum with 34+ articles; accessory flagellum short with 5 articles. *Antenna 2* peduncular article 2 cone gland reaching beyond end of peduncular article 3; article 4 longer than article 5; flagellum with 19 articles. *Mandible* accessory setal row well developed with 4 setae; molar well developed, triturative; mandibular palp present, 3-articulate; article 1 swollen along entire article, four times as long as broad, longer than article 2; article 2 shorter than article 3; article 3 long (more than six times as long as broad), article 3 subequal in length to article 1, with 2 long slender apical setae.

Pereon. *Gnathopod 1* coxa anterior margin concave, anteroventral corner produced, acute; carpus about twice as long as broad, longer than propodus; propodus palm subacute, straight, entire, defined by posterodistal corner, with 2 posterodistal robust setae. ***Gnathopod 2*** subchelate; basis slender; carpus compressed, lobate, projecting between merus and propodus; propodus massive, with clusters of slender setae along posterior margin, palm straight, smooth, about one third length of propodus, with subrectangular distomedial shelf, with 3 robust setae on shelf, palmar margin with groups of robust setae, **facial margin forming broad tabular blade (heavily calcified), posteroventral corner defined by 90° angle**, without posterodistal robust setae, facial margin with dactylar socket; **dactylus with crenulated posteroproximal shelf**, reaching end of palm, **closing into socket, with apical restriction**. *Pereopod 4* coxa posteroventral lobe well developed, with rounded posteromedial corner. *Pereopods 5–7* **basis posterior margin heavily serrate**, without long slender setae, merus not broadened. *Pereopod 5* basis linear; posterior margin concave, posteroventral corner serrate. *Pereopod 6* basis posterior margin straight, posteroventral corner serrate. *Pereopod 7* basis posterior margin straight, posteroventral corner produced posterodistally, lobate, with acute serrate process; propodus not expanded posterodistally. *Pereonite 7* dorsally bicarinate.

Pleon. ***Pleonite 1-3* dorsally bicarinate**. *Epimeron 1-2* posteroventral corner with small acute spine. *Epimeron 3* ventral margin serrate distally, posteroventral margin serrate below posteroventral corner, posteroventral corner with strongly produced acute spine. *Urosomite 1* bicarinate. *Uropod 1* peduncle with basofacial robust seta. *Uropod 3* rami distally truncated to subacute, with long and short apical robust setae; inner ramus longer than peduncle, subequal in length to outer ramus; outer ramus three times as long as broad. *Telson* deeply cleft, as long as broad, lobes divergent, distally truncated, with 4 - 5 long apical robust setae.

Female (dimorphic characters). Based on paratype female, 13.5 mm, MV J60147.

Pereon. ***Gnathopod 2* carpus very long about, 2.5 times as long as wide**, not lobate, not enclosed by merus and propodus; propodus linear, about four times as long as broad, without distomedial shelf; dactylus without posteroproximal shelf, apically subacute.

Remarks. Parelasmopus poorei sp. nov. can be distinguished from other species of *Parelasmopus* by the male gnathopod 2 propodus with the calcified straight blade-like palm and the dactylus distal apical constriction which closed into a socket on the medial side of the propodus palm. In male juvenile specimens, about 6 mm, the gnathopod 2 constricted dactylus has not developed.

Parelasmopus poorei sp. nov. male gnathopod 2 propodus palm is defined by a right angle corner similar to *P. cymatilis* Lowry & Hughes, 2009, *P. setiger* Chevreux, 1901, *P. suluensis* (Dana, 1852), *P. suensis* (Haswell, 1879) and *P. zelei* Ledoyer, 1982. The combination of pereopods 5 - 7 basis with heavily serrate posterior margin and bicarinate pleonite 3 further distinguishes *P. poorei* sp. nov. and *P. cymatilis* from these species. The lack of serrations on the gnathopod 1 coxa separates *P. poorei* from *P. cymatilis.*

Distribution. Australia. Victoria: Point Ricardo, Wilsons Promontory. Western Australia: Dongara, Two Peoples Bay, Mullaloo (current study).

Acknowledgements.

I would like to thank Joanne Taylor (Museum Victoria) for loaning and curation of material.

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